



**FEMA**

MAY 10 2005

MEMORANDUM FOR: Terry Reuss Fell  
Chief, Hazard Identification and Risk Assessment Branch  
FEMA Region V

FROM: Michael M. Grimm *[Signature]*  
Chief, Community Assistance Section  
Risk Assessment Branch  
Mitigation Division

SUBJECT: Basement Exceptions in Brown County

This is in response to your request for assistance in addressing what effect the countywide restudy of flood hazards would have on the basement exceptions for Brown County and the communities of Allouez, Ashwaubenon, De Pere, Green Bay and Howard and what effect it may have on the newly incorporated communities of Bellevue, Hobart, and Suamico as it relates to obtaining a basement exception.

**Background and Findings**

We reviewed the current effective and proposed Base Flood Elevations (BFEs) for the following studied rivers:

- Ashwaubenon Creek (Village of Ashwaubenon, City De Pere, unincorporated Brown County)
- Baird Creek (City of Green Bay)
- Beaver Dam Creek (Village of Howard, City of Green Bay)
- Duck Creek (Village of Howard, City of Green Bay, Village of Hobart)
- Dutchman Creek (Village of Ashwaubenon)
- East River (City of Green Bay, Village of Bellevue, Village of Allouez, unincorporated Brown County, City of De Pere)
- Fox River (City of Green Bay, Village of Allouez, Village of Ashwaubenon, City of De Pere, unincorporated Brown County)
- Green Bay (Village of Suamico, Village of Howard, City of Green Bay unincorporated Brown County)
- Lancaster River (Village of Howard)
- North Branch of Willow Creek (City of Green Bay)
- Suamico River (Village of Suamico)
- Willow Creek (Village of Bellevue, City of Green Bay)

Attached are tables that provide a detailed comparison of the current effective and proposed BFEs for the rivers identified above and a summary report of the new and proposed BFEs, which were prepared by Dewberry and Davis, the Mapping Coordinating Contractor (MCC) for this project. We reviewed the current effective and proposed BFEs for the studied rivers along with the draft preliminary maps. Below is a summary of our review of the flood hazard data:

- For the entire studied reaches of the Fox River and Lancaster Creek, the proposed BFEs stay the same or decrease.
- For Ashwaubenon Creek, East River, Dutchman Creek, and Suamico River, the increase in the proposed BFEs ranges from .1 foot to 2 feet. The increase is on average less than one foot for most of these rivers. There are also a number of segments on these rivers where BFEs actually decrease.
- For the flooding source from Green Bay, the new BFEs only increase by approximately a foot.
- There are five rivers where proposed BFEs in some locations increased by over 2 feet. However, these increases are not a significant issue for the basement exception:
  - On Beaver Dam Creek between 13500 and 19900 feet up stream where it flows through the Village of Howard and the City of Green Bay, there are increases in BFEs that range from 2.5 to 6 feet. The increase in BFEs in Howard is generally in the vicinity of where Highways 41 and 29/32 meet. The bridges and culverts are likely contributing to most of this increase. Within the City of Green Bay, the floodplain is fairly narrow and the increase in BFEs generally occurs in areas where most of the floodplain is designated as floodway.
  - On Baird Creek approximately 13000 feet upstream, there is an increase in the proposed BFE of up to 2.5 feet; however, this increase generally occurs where most of the floodplain is designated as floodway.
  - On Willow Creek, there is an increase of 3 feet at one location, which is likely at a bridge or culvert.
  - On the North Branch of Will Creek, the 3-foot increase in BFE is only on the first 1500 feet of the Creek, after this point the BFEs generally decrease.
  - While the BFEs on Duck Creek generally decrease through the Village of Howard and Green Bay, there is an increase of up to 6 feet through Hobart, which recently joined the NFIP and would have to apply for a basement exception under 60.6(c).

We obtained flood insurance policy and claims data on residences with floodproofed basements in Brown County and the other communities. There are 110 insured residences with floodproofed basements. The attached table summarizes the approximate location of these policies by community and by flooding source. There does not appear to be any flood insurance claims for the insured residences with floodproofed basements in Brown County and the other communities.

We also looked at the location of insured residences with floodproofed basements relative to the BFE increases. While most of the insured residences with floodproofed basements are in Zone AE, there are some policies located in Zone X. It appears that most of the insured residences are located in areas where the increase in the BFE is a foot or less or are located in areas where BFEs are decreasing. Attached is a summary of insured residences with floodproofed basements.

We also reviewed the basement exception provisions in three of the floodplain management ordinances. They included Brown County, Village of Allouez, and City of Green Bay's floodplain management ordinances. Please note that the ordinances allow the location of floodproofed basements in A-Zones. Floodproofed basements are only permitted in Zones A1-30, AH, AO, and AE. FEMA did not intend to allow floodproofed basements in A Zones where BFEs have not been developed for basement exceptions granted under 60.6(b) or (c). However, it is our understanding that the community requires applicants for a floodproofed basement in an A Zone without BFEs to develop a BFE, which would then be submitted to Wisconsin's Department of Natural Resources for an engineering review before the community adopts it. Since the State reviews and approves the BFE and the community adopts the data, we believe this satisfies the NFIP floodplain management requirements.

### **Conclusions**

Based on the review of the flood hazard data, we do not see a need to change the basement exception status in the six communities of Allouez, Ashwaubenon, De Pere, Green Bay, Howard, and Brown County. Region V should review all of the ordinances for the basement exception communities to ensure that they have the appropriate basement exception provisions cited in their ordinance as well as meet the minimum criteria in 44 CFR 60.3.

This is also to reaffirm the decision that the participating communities of Bellevue, Hobart, and Suamico would have to apply for the exception under 60.6(c) for the entire community and adopt the current provisions at 60.6(c)(2)(i)-(v). In addition, State of Wisconsin higher standards related to freeboard and use of fill would have to be included.

The reason that these communities would have to apply for a basement exception is that they were not a part of the environmental review for the original basement exception request. The original basement exception was granted based on a hardship determination and an environmental review that was limited to the urbanized areas around the City of Green Bay. The environmental review did not address outlying areas including these three newly incorporated communities. The decision to require Bellevue, Hobart, and Suamico to apply for a basement exception is also consistent with the decision in which Allouez was made to apply for a basement exception under 44 CFR 60.6(c) in 1992.

Please note, there are approximately 12 insured residences with floodproofed basements in Bellevue and Suamico built under the Brown County exception. The data did not indicate that there are insured residences with floodproofed basements in Hobart, but there may be some. The policies are probably still listed under Brown County's community number and therefore, retain their floodproofed basement exception rating. While policies remain under Brown County's number, they retain this rating. However, eventually the 12 policies will have to be written under the Bellevue or Suamico community number. If Bellevue or Suamico do not apply for a basement exception or do not qualify for an exception once they apply, the Mitigation Division's Underwriting Section indicated that they would be willing to notify the insurance companies that these 12 residences can retain the floodproofed basement rating.

have any questions about the analysis of the flood hazard data and conclusions on the statement exception in Brown County, please contact Mike Grimm at (202) 646-2878 or Lois : (202) 646-2720

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erwriting Section, Mitigation Division